

# A Study On E-Commerce And E-Retailing: Analysing The Factors And Perceptions Of Indian Millennials For Online Purchase And Its Impact On Market And Retailers In Madhya Pradesh

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**Abstract** - The Internet is a necessary component of our daily existence. We accomplish nearly all of our daily duties online. Prior to e-commerce rise in India, goods were bought and sold in offline markets; but, e-commerce's numerous advantages have made life easier for us now. Through online shopping, we can buy and sell items of our choosing at a fair price thanks to Indian e-commerce companies.

Innovative strategies are employed by marketers and service providers such as Amazon, Flipkart, and others to draw in and keep customers. It's important to comprehend the motivations behind and perceptions of Indian millennial online store visits. It is looked at in the context of India in this study. In general, millennial are happy with the goods and services offered by a selective group of online retailers. It has been demonstrated that four factors are statistically significant in millennial decision to shop at an online retailer.

E-commerce sites have sprung up one after another in recent years. Examples of these include Pinduoduo and Taobao in the low-end market, Tmall and JD.com in the high-end Chinese market, and Amazon and eBay in the high-end international industry. It is not that hard for multiple businesses to split the internet retail market. Still, big data analysis, for instance, enables businesses to more precisely and suitably price various products for various consumer segments. Four well-known e-commerce sites are now selected for examination in this paper: JD, Taobao, Pinduoduo, and Tmall. examining consumer buying patterns and motivations for using various platforms. For various online

The influence of review systems, comments, and reviews on sales varies. As per the system of classed appraisal, the Sales are significantly impacted positively by the overall number of reviews and the number of positive remarks. Adverse Sales are significantly impacted negatively by reviews and comments. Because internet shopping platforms are so homogeneous, it can be challenging for customers with particular demands to look for e-commerce platforms that work. Additionally, the user stickiness of various e-commerce platforms varies. For various goods. Consequently, knowing customers' inclinations and motivations for making purchases on the platform can assist businesses in increasing the precision and efficiency of their marketing.

In order to determine whether the four platforms are effective at marketing to various consumer groups and to determine why these platforms appeal to different consumer groups, the author is conducting this experiment in the hopes of gathering consumer input.

When purchasing various products, people typically have clear preferences, according to the poll. As an illustration, they when purchasing electrical things, they typically go with JD.com; yet, when purchasing purchasing inexpensive everyday essentials. Additionally, the writer will categorize the customers taking part in the survey based on age and gender to examine the influence of these variables on the purchasing decision platform

**Keywords:** *perceptions, retailing, millennials, service quality E-commerce and Marketing strategy.*

## I. INTRODUCTION

E-commerce allows customers to overcome geographical barriers and allows them to purchase products anytime and from anywhere. E-commerce has a major impact on the markets & retail industry in a variety of ways. E-commerce will eliminate mediation process as producers can directly sell to consumers. India has become a significant player in the contemporary global corporate scene. Since the start of reforms in 1991, scholars studying worldwide business and management have directed their attention toward China's economic growth. With an eye toward in order to ascertain which publications have had a significant impact, which issues have gotten the greatest focus, the primary conclusions, or the areas in need of more investigation, this paper studies current articles on the influence published in prestigious business and management journals of online shopping on the Indian market.

Businesses, families, individuals, governments, and other public or private entities can do business online. Orders placed via the internet, extranet, or electronic information commerce are included in these electronic exchanges. The method used to submit the request determines the type of transaction that takes place. Orders placed by fax, phone, or by handwritten messages are typically forbidden. Some or all of the following may be used by online business organizations:

Online shopping platforms that facilitate direct e-commerce and e-retailing deals between buyers and sellers; offering or investing in online commercial centres that handle transactions between sellers and buyers or between sellers and other businesses.

- Moving and purchasing across businesses
- Compiling and using statistical data via online connections and internet-based live
- Electronic information exchange between businesses to e-commerce and e-retailing
- Email or fax marketing (e.g., bulletins) to potential and existing clients
- Pursuing success in promoting new products and services of e-commerce and e-retailing

The purchasing and selling of goods using online platforms or the Internet is known as e-commerce.

Technologies including mobile commerce, electronic funds transfers, supply chain management, online transaction processing, electronic data interchange (EDI), inventory management, and Internet marketing are all used in electronic commerce. Systems, as well as automated methods for gathering data.

Although it may also employ other technologies like email, modern electronic commerce usually leverages the World Wide Web for at least one aspect of the transaction life cycle to use e-commerce and e-retailing. Online book and music purchases (from retailers like Amazon) and digital music downloads (from iTunes Store) are examples of

common e-commerce transactions. Customized or personalized online liquor store inventory services are less common. E-commerce is divided into three categories: online shopping, electronic and online payments.

## II. E-COMMERCE AND ITS IMPACT ON INDIAN MARKET

Reports from the Central Statistics Office (CSO) and the International Monetary Fund (IMF) have confirmed that India's economy is among the fastest-growing in the world (CSO). Because retail has become such a significant business segment in India, e-commerce has expanded at a rate never seen before. With an annual multifaceted growth rate (CAGR) of 52%, e-commerce is the fastest-growing business in India and is expected to reach USD 36.7 billion by 2020. E-commerce is not limited to metropolitan areas; it is also extensively connected in rural areas. Additionally by the year's end. The following elements are driving India's e-commerce industry:

- Foreign Direct Investment
- Tax on Goods and Services
- Niche businesses taking part in online trading of e-commerce and e-retailing.

The goal of this study is to determine how e-commerce has affected consumers of Madhya Pradesh, their purchasing habits and to identify the variables that affect the residents decision to purchase groceries online. This study examined both the favourable and unfavourable consumer behaviour during the decision-making process. When choosing what to buy, attitudes that are positive or negative have an equal influence. The most popular e-commerce website in the Madhya Pradesh is also being investigated by this study.

E-commerce's and e-retailing simple and user-friendly business model has contributed to its great success in the Indian market. As consumers integrate cutting-edge technology into their daily routines, the market's requirements and preferences are changing. Due to e-commerce's seamless integration into daily life, consumers' habits and standards of living are evolving, making them more sophisticated. As life changes quickly, consumer perceptions in e-commerce are evolving as well. It was discovered during a review of the previous research that there is a significant lag between the literature and the current research. Therefore, it is necessary to research consumer purchasing behavior since, as time, technology, and living standards change, so does consumer behavior. The goal of this study is to examine what customer's purchase, their behavior regarding technology or other factors. Another goal of this study was to bridge the knowledge gap between previous and current research.

## III. ADVANTAGES OF ONLINE SHOPPING

Online shopping offers several benefits, including time savings as it eliminates the need for customers of visit multiple stores in e-commerce and e-retailing.

- Online shopping is available around-the-clock.
- Online apps also provide platforms for the advertisement and marketing of new products.
- Online shopping offers a multitude of options for goods and services.
- The convenience of shopping online is a significant benefit.
- Online shopping provides comprehensive details about products, including their qualities, drawbacks, and features.
- Additionally, it offers other customers' positive and negative experiences so that the buyer can quickly decide whether or not to make a purchase or not.

#### IV. DISADVANTAGE OF ONLINE SHOPPING

- You cannot touch the products when you shop for online, which is one drawback.
- Sometimes there may be a delivery delay for whatever reason.
- There is a possibility of fraud when shopping from online apps.
- When shopping for online, there's a chance that the products won't arrive as intended.
- Online shopping is primarily dependent on internet access; customers who do not have internet access cannot do any transaction or purchasing.

#### V. LITERATURE REVIEW

**Dahiya Menal, (2017)** Our everyday lives now revolve around the Internet. Almost everything we do on a daily basis involves the internet. Buying and selling were occurred in physical marketplaces over the counter before e-commerce arrived in India. But e-commerce's many advantages have made life easier for us. Indian e-commerce websites are very popular since they enable us to do our online shopping and purchase and sell the products of our choice at a fair price. An e-commerce website has a significant impact on a variety of marketplaces and businesses. This article will examine the many merchants and a marketplace, as well as the impact that e-commerce has had on them.

**Dr. Mahesh, (2016)** Electronic commerce, or e-commerce, is the trade of products and services using computer networks like the internet. Among the various technologies used in e-commerce today are mobile commerce, electronic store transfer, production network management, internet marketing, online exchange processing, EDI, inventory management systems, and automated information gathering systems. The business models of e-commerce providers and traditional retailers are extremely dissimilar. The strength of e-commerce is in its capacity to reach customers in a manner that is distinct from traditional brick-and-mortar establishments, right down to their front door. In India, e-commerce is significantly affecting traditional retail establishments. Consequently, their online marketing

efforts have been less successful. The principal aim of the research is to gain an insight into the present condition of electronic commerce in India. The effect of internet shopping on conventional physical retail establishments. Traditional retail is being impacted by electronic commerce in both positive and negative ways.

**Bhatiasevi, (2018)** This study looked into the variables that affect Thai consumers' decisions when they shop for groceries online. This study used a quantitative, self-administered online survey to gather information from Thai customers who shop for groceries online. The majority of the sample size consisted of women, followed by children, people under 40, and people with higher education. This study indicates that the majority of consumers hardly ever purchase groceries online. This study looked at how consumers' online shopping behavior was influenced by variables such as model variable and acceptance of technology. This study suggested that consumer behavior and technology both affected consumers' decisions to make online purchases, and that this needs to be further investigated.

**Aggarwal, S., Aggarwal, R., and Singla, A. (2012),** Based on their data, the authors estimate that organized retail in India had a \$260 billion market size in 2011 with a 21 percent penetration rate. Retail sales in the country were \$471 billion. As the authors note, allowing foreign direct investment (FDI) may help improve supply chain technologies. Suppliers, customers, and local players may all profit from competitive dynamics. The report states that the development of a world-class supply chain architecture that lowers corporate information, manufacturing, and other costs is a significant benefit of FDI for India.

**Jiang, Ling (Alice), (2013)** Since convenience is a major factor in why customers choose to shop online, this paper attempts to define the essential convenience aspects of online shopping. After conducting in-depth focus groups with online shoppers to ascertain the features of online shopping convenience, the researchers utilize information from an online questionnaire survey to develop and assess a five-dimension scale for measuring online shopping convenience. The five dimensions of online shopping convenience identified by this research are possession/post-purchase convenience, transaction, evaluation, search, and access.

**Rajesh, (2019)** The purpose of this study was to determine the variables influencing consumers' e-grocery purchasing decisions. Additionally, it sought to determine the demographic variables influencing consumers' decisions to buy groceries online. This study took place close to Mumbai. Exploratory research methodology was used. A survey that was conducted online was used to gather data. A structured questionnaire was used to analyze the demographic profiles of the customers, including their age, gender, and monthly income, as well as how often they shopped and which websites they preferred. The sample

consisted of 117 Mumbai residents who shop for groceries online. Convenience sampling was the method used. The study's conclusions revealed that aspects of online grocery shopping, including product availability, choice, and delivery time, an effect on shoppers who are male and female. The study recommended that marketers focus on three areas: product availability and choice, online grocery delivery and replacement, and product descriptions.

**VI. RESEARCH METHODOLOGY:**

**Objective of the study:**

- To study the impact of e-commerce on consumers buying behaviour in Madhya Pradesh.
- To understand what factors influence consumers buying behaviour to shop products online in Madhya Pradesh?
- To identify the most preferred e-commerce website or app.
- To identify which model of payment consumers prefers more for online shopping or online payment mode.
- To study what E-commerce mean?

**Research Hypothesis:**

Following hypothesis framed to achieve research objective:

H<sub>0</sub>: There is no impact of e-commerce and e-retailing on consumers buying behaviour.

H<sub>1</sub>: The quality of services provided by online e-commerce and e-retailing is not Satisfactory.

**Scope of the Study:**

In India, E-commerce and e-retailing is very popular nowadays. Online shopping will eventually replace traditional retail. Online shopping has the power to alter consumers' purchasing habits, even though offline shopping will always exist. The purpose of this study was to identify the factors that influence consumers to shop for online and to better understand how they behave when they shop online. The purpose of this study is to identify the aspects of online shopping that consumers find objectionable and those that they find appealing. This study, which had a sample size of 1650 respondents, was restricted to Madhya Pradesh Research Design and Methodology

**Primary Data:**

These are the data or information that are collected from other primary sources, i.e., the data's source of origin. In this project report primary data collected from a sample size of 1650 respondents residing in Madhya Pradesh.

**Secondary Data:**

Data that already exists is referred to as secondary data. Secondary data gathered from books, the internet, and published literature is used in this project report.

**Sample Design:**

**Population:** A population is a whole group regarding which you want to conclude about, is known

as population. The population of this study is residents of Madhya Pradesh.

**Sample Size:** The sample size chooses for this study is 1650 of Madhya Pradesh

**Sampling Method:** stratified random sampling method employed in this study.

**Stratified Random Sampling Method:** Stratified random sampling refers to a sampling method that involves the division of the population into smaller sub-group known as strata.

**Data Collection Tool:**

To collect the primary data , Questionnaire is used for the empirical research on the impact of e-commerce on consumer buying behaviour with special reference to E-commerce and e-retailing in Madhya Pradesh.

**VII. DATA REPRESENTATION AND ANALYSIS**

**Data representation and Interpretation:**

$$\text{Percentage} = \frac{\text{No. of Respondents}}{\text{Total no. of Respondents}} * 100$$

**Personal information:**

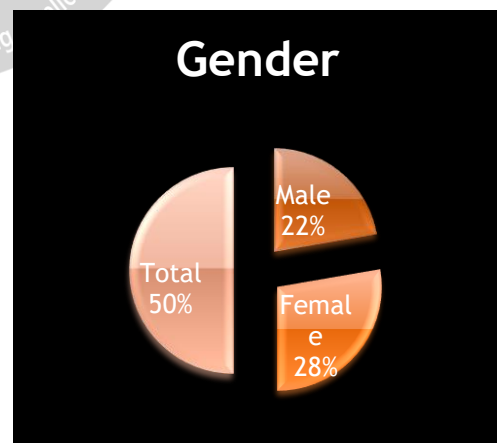
**Question1 Gender**

**Table 1** Table showing the Gender of Respondents

Gender	Respondents	Percentage
Male	735	44.54%
Female	915	55.46%
Total	1650	100%

Sources: Based on Primary Data

**Pie Chart 1** Pie Chart showing the Gender % of Respondents



**Interpretation :**

The above Table and Diagram shows that out of the total 1650 respondents, 44.54% of the participants were women and 55.46% were male.

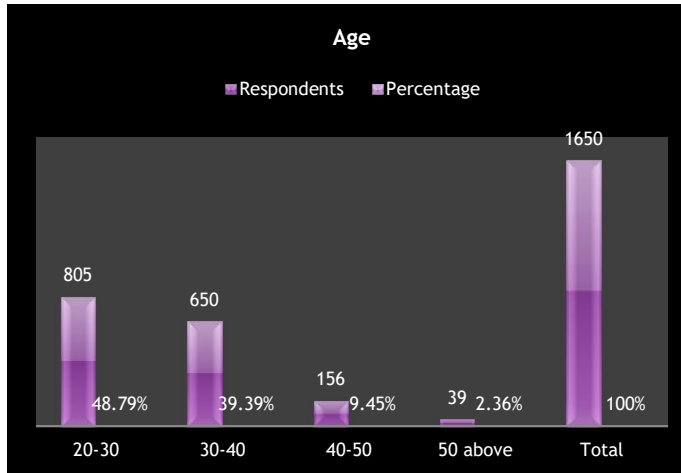
**Question 2 Age**

**Table 2** Table showing Age of the Respondents

Age	Respondents	Percentage
20-30	805	48.79%
30-40	650	39.39%
40-50	156	9.45%
50 above	39	2.36%
<b>Total</b>	<b>1650</b>	<b>100%</b>

Sources: Based on Primary Data

**Bar Chart 2** Bar Chart showing the Age % of Respondents



**Interpretation :**

The above table and diagram show that out of the total respondents, 48.79% were between 20-30, and 39.39% were between 30-40, 9.45% were between 40-50, and only 2.36% were 50 above respondents were participated in the survey. It means that the majority of respondent who were participated in survey between the age group of 20-30.

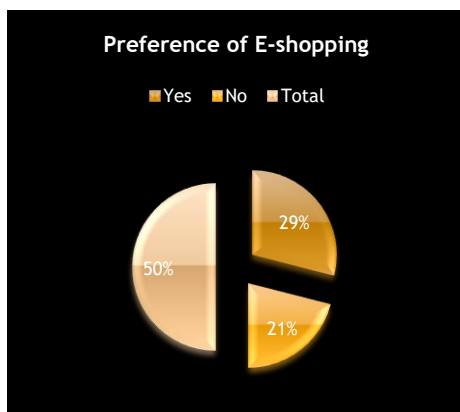
**Question 3 Preference for online shopping :**

**Table 3** Table showing the preference for online shopping

Preference of E-shopping	Respondents	Percentage
Yes	1160	58.00%
No	840	42.00%
<b>Total</b>	<b>2000</b>	<b>100%</b>

Sources: Based on Primary Data

**Pie Chart 3** Pie Chart showing the Preference for online shopping



**Interpretation :**

The above table and diagram show that out of the total respondents 58.00% preferred online shopping, or only 42.00% don't prefer it.

It means that the majority of respondents preferred online shopping

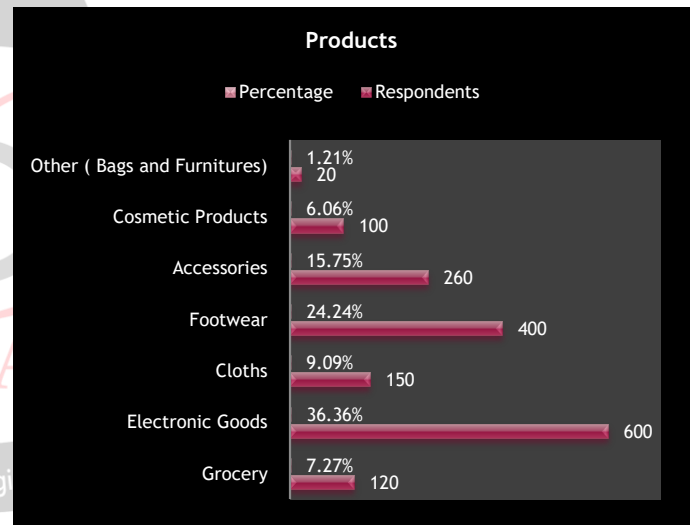
**Question 4 Products Preferred in Online Shopping :** ( In this question people select more than one checkbox, so % are more than 2000 and respondents are more than 1160.)

**Table 4** Table showing products preferred in E-shopping

Products	Respondents	Percentage
Grocery	120	7.27%
Electronic Goods	600	36.36%
Cloths	150	9.09%
Footwear	400	24.24%
Accessories	260	15.75%
Cosmetic Products	100	6.06%
Other ( Bags and Furnitures)	20	1.21%

Sources: Based on Primary Data

**Bar Chart 4** Bar Chart showing products preferred in E-shopping



**Interpretation :**

The bulk of respondents buy clothes, as shown by the table and diagram above. The second most favoured products are footwear, accessories, and electronic goods. Additionally, it demonstrates that most women purchase groceries and cosmetics. Other products offered for sale on e-commerce include furniture and bags.

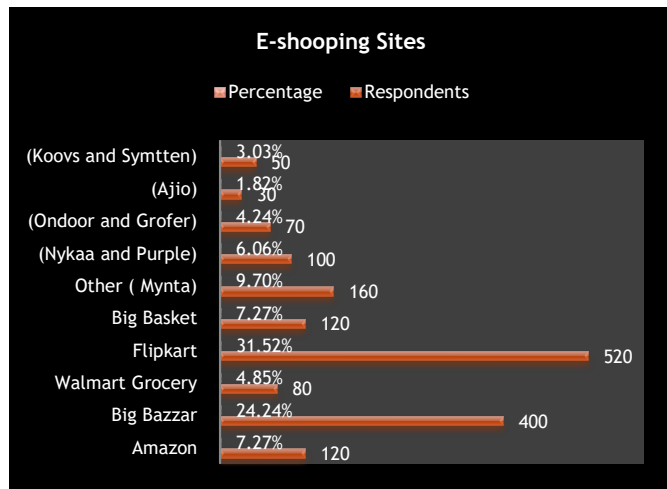
**Question 5 Most preferred E-shopping App and Sites :** ( In this question respondents select more than one checkbox, that's why % are more than 2000 and total respondents more than 1650)

**Table 5** Table showing most preferred E-shopping App and Sites

E-shooping Sites	Respondents	Percentage
Amazon	120	7.27%
Big Bazaar	400	24.24%
Walmart Grocery	80	4.85%
Flipkart	520	31.52%
Big Basket	120	7.27%
Other ( Mynta)	160	9.70%
(Nykaa and Purple)	100	6.06%
(Ondoor and Grofer)	70	4.24%
(Ajio)	30	1.82%
(Koovs and Symtten)	50	3.03%

Sources: Based on Primary Data

**Bar Chart 5** Bar chart showing most preferred E-shopping App and Sites



**Interpretation :**

The above diagram depicts that the majority of respondents purchase product and services from Amazon and Flipkart. It means that Amazon and Flipkart are the most trustable brands. Big Bazaar, Big Basket, Myntra are the second-most usable sites and app.

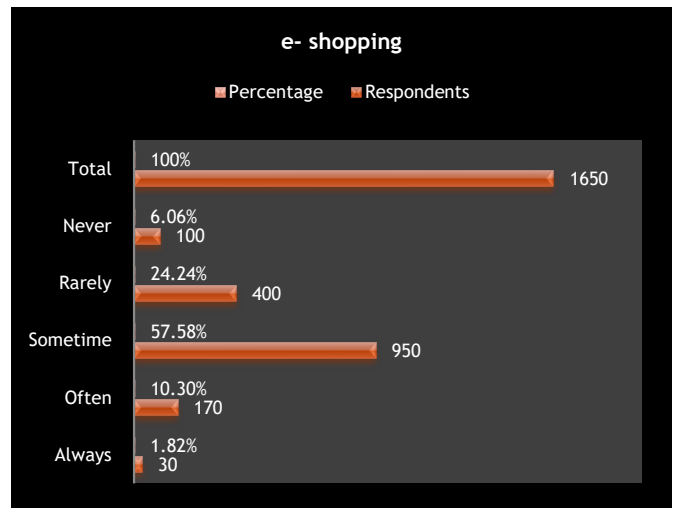
**Question 6** How often respondents buy online?

**Table 6** Table showing the frequency of e- shopping

Options	Respondents	Percentage
Always	30	1.82%
Often	170	10.30%
Sometime	950	57.58%
Rarely	400	24.24%
Never	100	6.06%
<b>Total</b>	<b>1650</b>	<b>100%</b>

Sources: Based on Primary Data

**Bar Chart 6** Bar Chart showing the frequency of e- shopping



**Interpretation :**

The above table and diagram depict that out of total respondents, 57.5% respondents sometimes use online apps for shopping and only 1.82% of respondents always use online apps for shopping

It means that out of the total respondents, the majority of respondents sometimes use online apps for shopping.

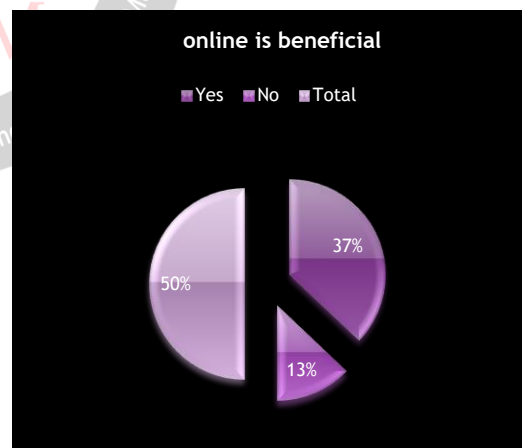
**Question 7** Online shopping is beneficial or not?

**Table 7** Table showing online shopping is beneficial or not

Options	Respondents	Percentage
Yes	1225	74.24%
No	425	25.76%
<b>Total</b>	<b>1650</b>	<b>100%</b>

Sources: Based on Primary Data

**Pie Chart 7** Pie Chart showing online shopping is beneficial or not



**Interpretation :**

According to the above table and diagram, 74.24% of respondents agreed that online is advantageous, while 25.76% disagreed. It indicates that most respondents believe there are advantages of purchasing things online. The remaining respondent believes that there are drawbacks to ordering things online, including high costs, erroneous delivery, and the inability to physically inspect and handle the goods.

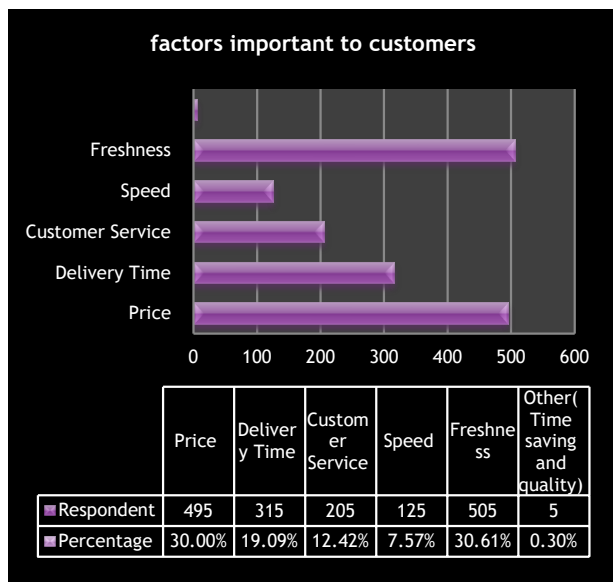
**Question 8** Which factors are most important to consumers while online shopping: ( In this question respondent, select more than one checkbox, that's why % are more than 2000 and respondents are more than 1650.

**Table 8** Table showing which factors important to customers while online shopping

Fators	Respondent	Percentage
Price	495	30.00%
Delivery Time	315	19.09%
Customer Service	205	12.42%
Speed	125	7.57%
Freshness	505	30.61%
Other( Time saving and quality)	5	0.30%

Sources: Based on Primary Data

**Bar Chart 8** Bar Chart showing which factors important to customers for online shopping



**Interpretation:**

The table and diagram above demonstrate that when consumers are choosing between online delivery options, the two most important considerations are price and freshness. After customer service and speed, delivery time is deemed the second most significant factor. This indicates that when choosing to buy things online, all of the aforementioned considerations are crucial.

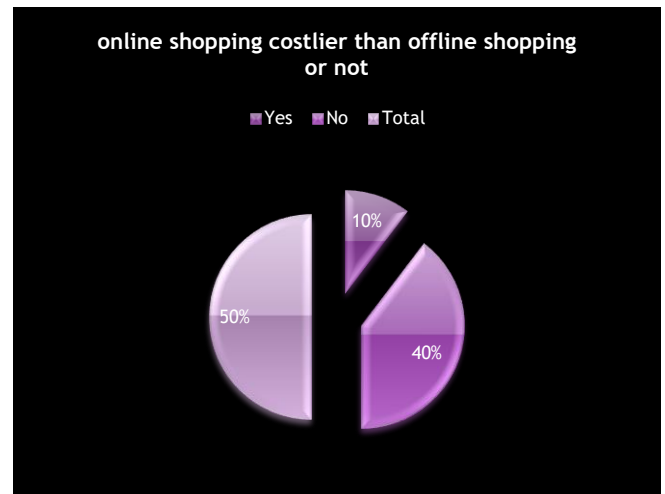
**Question 9** Is online shopping is costly than offline shopping?

**Table 9** Table showing online shopping costlier than offline shopping or not

Options	Respondents	Percentage
Yes	342	20.73%
No	1308	79.27%
Total	1650	100%

Sources: Based on Primary Data

**Pie Chart 9** Pie Chart showing online shopping costly than offline shopping or not



**Interpretation :**

The majority of respondents concur that online shopping is not expensive, as shown by the table and diagram above. This indicates that the majority of respondents overall think that shopping online is less expensive than doing so in person.

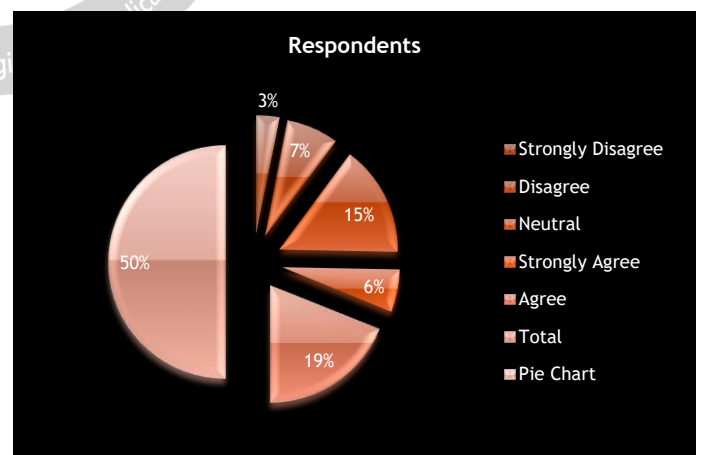
**Question 10** Online shopping offers great discount and rewards :

**Table 10** Table showing online shopping offers great discount and rewards

Options	Respondents	Percentage
Strongly Disagree	100	6.06%
Disagree	235	14.24%
Neutral	500	30.30%
Strongly Agree	190	11.52%
Agree	625	37.88%
Total	1650	100%

Sources: Based on Primary Data

**Pie Chart 10** Pie Chart showing online shopping offers great discount and rewards



**Interpretation :**

The above table and diagram depict that the majority of the respondents agree with the statement that E-shopping offers discount and reward. Out of the total respondents, 30.30% neither agreed with the statement nor disagree. And, only 6.06% and 14.24% did not agree with the statement.

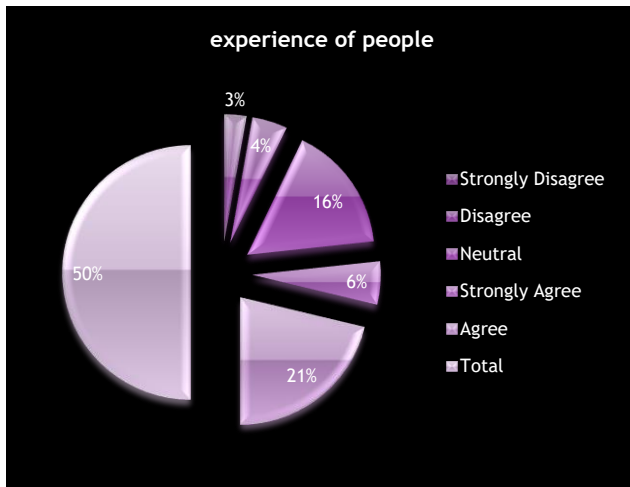
**Question 11** Online shopping tells the positive and negative experience of people :

**Table 11** Table showing online shopping tells the positive and negative experience of people

Options	Respondents	Percentage
Strongly Disagree	90	5.45%
Disagree	145	8.79%
Neutral	534	32.36%
Strongly Agree	180	10.91%
Agree	701	42.48%
<b>Total</b>	<b>1650</b>	<b>100%</b>

Sources: Based on Primary Data

**Pie Chart 11** Pie Chart showing online shopping offers great discount and rewards



**Interpretation:**

The above table and diagram show that the majority of the respondents agree with the statement that E-shopping tells the positive and negative experience of the consumers. Out of the total respondents, 32.36% neither agreed with the statement nor disagree. And, only 5.45% and 8.79% disagreed with the statement.

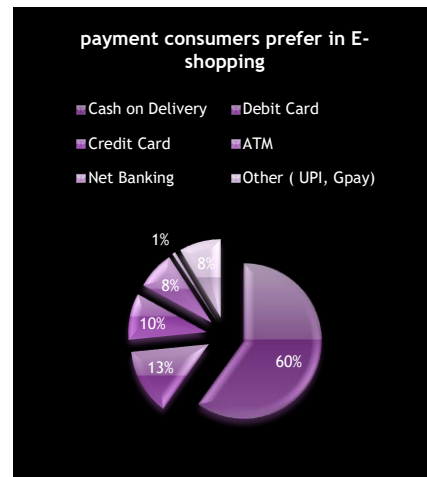
**Question 12** Which mode of payment due use in E-shopping? ( In this question respondents may select more than one checkbox, so % may more than 2000 or a total of respondents more than 1650)

**Table 12** Table showing which mode of payment consumers prefer in E-shopping

Mode of payment	Respondents	Percentage
Cash on Delivery	989	59.94%
Debit Card	223	13.52%
Credit Card	157	9.52%
ATM	130	7.88%
Net Banking	11	0.67%
Other ( UPI, Gpay)	140	8.48%

Sources: Based on Primary Data

**Pie Chart 12** Pie Chart which mode of payment consumers prefer in E-shopping



**Interpretation:**

The majority of respondents prefer cash on delivery as a method of payment, as shown by the above table and diagram. The second most favored payment method is debit cards and net banking. Payment methods that are least preferred include credit cards, UPI, and Google Pay.

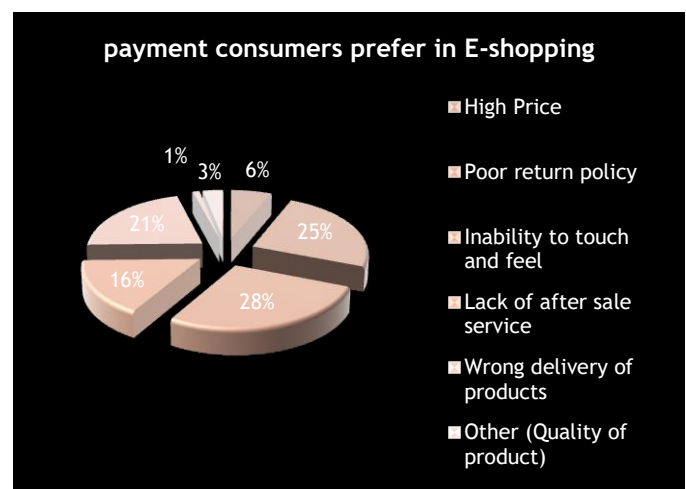
**Question 13** What characteristics of e-shopping you don't like? (In this question respondents may select more than one checkbox, so % may more than 2000 or total of respondents more than 1650)

**Table 13** Table showing characteristics of e-shopping consumers don't like

Characteristics	Respondents	Percentage
High Price	120	7.27%
Poor return policy	473	28.67%
Inability to touch and feel	530	32.12%
Lack of after sale service	310	18.79%
Wrong delivery of products	406	24.61%
Other (Quality of product)	20	1.21%
(Sizes mostly out of Stock)	60	3.64%

Sources: Based on Primary Data

**Pie Chart 13** Pie Chart which mode of payment consumers prefer in E-shopping





**Interpretation:**

One of the biggest drawbacks of online shopping, according to the above table and diagram, is that most respondents dislike not being able to touch and feel products. One of the main drawbacks of online shopping is its inadequate return policy. It also showed that customers experience the same kinds of drawbacks from incorrect product deliveries, a lack of post-purchase services, low product quality, and stock shortages.

**VIII. HYPOTHESIS TESTING**

**H<sub>0</sub>:** There is no impact of e-commerce and e-retailing on consumers buying behaviour

**Table of x<sup>2</sup>**

Satisfied	Male (O)	Male (E)	Female(O)	Female(E)	Total
Yes	690	693.4	873	869.6	1563
No	42	38.6	45	48.4	87
<b>Total</b>	<b>732</b>		<b>918</b>		<b>1650</b>

Observed Variable (O), Expected Variable (E)

$$x^2 = \sum \frac{(o - E)^2}{E}$$

$$E = \frac{RT * CT}{N}$$

N = 1650

**Calculation of x<sup>2</sup>**

o	E	o - E	(o - E) <sup>2</sup>	$\frac{(o - E)^2}{E}$
690	693.4	3.4	11.56	0.02
42	38.6	-3.4	11.56	0.28
873	869.6	-3.4	11.56	0.01
45	48.4	3.4	11.56	0.26
<b>x<sup>2</sup></b>				<b>0.56</b>

chi-Square = 0.56

degree of freedom = (c-1)\*( r-1)  
= (2-1)(2-1)  
= 1

$x^2_{0.05} = 3.84$

**Interpretation :**

The calculated chi square (0.56) value is less than critical value (3.84) of chi square. So, null hypothesis that is there is no impact of e-commerce and e-retailing on consumers buying behaviour not rejected. Therefore, the alternative hypothesis that is there is significant impact of e-commerce on consumers buying behaviour is rejected.

**H<sub>0</sub>:** The quality of services provided by online e-commerce and e-retailing is not satisfactory

**Table of x<sup>2</sup>**

Satisfied	Male (O)	Male (E)	Female(O)	Female(E)	Total
Yes	669	675.29	870	863.71	1539
No	55	48.71	56	62.29	111
<b>Total</b>	<b>724</b>		<b>926</b>		<b>1650</b>

Observed Variable (O), Expected Variable (E)

$$x^2 = \sum \frac{(o - E)^2}{E}$$

$$E = \frac{RT * CT}{N}$$

N = 1650

**Calculation of x<sup>2</sup>**

o	E	o - E	(o - E) <sup>2</sup>	$\frac{(o - E)^2}{E}$
669	675.29	-6.29	39.56	0.06
55	48.71	6.29	39.56	0.81
870	863.71	6.29	39.56	0.05
56	62.29	-6.29	39.56	0.64
<b>x<sup>2</sup></b>				<b>1.55</b>

chi-Square = 1.55

degree of freedom = (c-1)\*( r-1)  
= (2-1)(2-1)  
= 1

$x^2_{0.05} = 3.84$

**Interpretation :**

The calculated chi square (1.55) value is less than critical value (3.84) of chi square. So, null hypothesis that is there is quality of services provided by online e-commerce and e-retailing is not satisfactory is not rejected. Therefore, the alternative hypothesis that the quality of services provided by online e-commerce and e-retailing is satisfactory is rejected.

**IX. CONCLUSION**

E-commerce, to put it briefly, is the practice of purchasing and selling produce using electronic channels, like the Internet and mobile apps. E-commerce encompasses electronic transactions as well as online retail. Over the past few decades, e-commerce has grown significantly in popularity and is gradually displacing traditional brick and mortar stores. E-commerce, then, has a significant influence on the markets and the retail sector in a number of ways. The mediation process will be eliminated by e-commerce since producers can sell directly to customers. Additionally, it will assist small and medium-sized businesses in expanding the market for their goods and services. This study involved 1650 respondents and was carried out in Madhya Pradesh.

The aforementioned data also showed that the most important considerations for customers while making an

online purchase are price, delivery time, freshness, product quality, speed, time-saving, etc.

The study's findings demonstrate the significance of responsiveness and website design when making an online purchase. For one thing, if they don't hear back from you right away, they'll look elsewhere. The standard of customer service provided by the online retailer is an additional factor to take into account. When choosing an online business, security and data confidentiality are also very important factors to take into account. Finally, but just as importantly, Indian millennials appreciate the customer service provided by online merchants in case of an issue. Being young and energetic, millennials expect the same kind of response from the website.

The effect of e-commerce on physical stores is the opposite, as customers are compelled to lower their own prices in order to purchase goods from online retailers at discounted prices. They need to spend more on out-of-home advertising in order to attract customers. Along with its advantages, e-commerce places limitations on markets and retailers. These include the high expense of developing and maintaining a website, the high cost of the infrastructure needed to process orders from online retailers, and the risks of fraud and security that come with the increasing popularity of online stores.

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